

CLASSIFIED MESSAGE

ROUTING *R*

DATE 2132Z 29 JUN 62

~~SECRET~~

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2	5 <i>C/DP</i>
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TO : DIRECTOR

EO 12958 3.3(b) (1) >2
(N)

OPERATIONAL IMMEDIATE

FROM

ACTION: OSA (1-2-3-4-5-6-7-8-9-10)

INFO : S/C (11)

OPERATIONAL IMMEDIATE

HW

TOR: 0006Z 30 JUN 62

IN: 41026

TO OPIM

INFO

CITE

5196

OXCART

EYES ONLY MR CUNNINGHAM, MR PARANGOSKI FROM COL NELSON

FLIGHTS NUMBERS 17 AND 18 FLOWN TODAY. BOTH WERE PRIMARILY FURTHER INVESTIGATION OF MACH 1.4 BUFFETT PROBLEM. FLIGHT NUMBER 17 WAS AS FOLLOWS: TOTAL FLIGHT TIME: ONE HOUR FIVE MINUTES. TAKE-OFF AT 0610 LOCAL WEIGHING 85,000 POUNDS, CG AT APPROX 22.2 PERCENT MAC, PILOT MR PARKS. TAKE-OFF IN AD WITH WATER. CLIMB IN AD TO 45 THOUSAND FEET. CLIMB SPEED 400 KEAS FROM 10 TO 30 THOUSAND FEET, WITH SPEED GRADUALLY REDUCING CLIMBING TO 45 THOUSAND. NOSE WAS LOWERED TO ACCELERATE, DESCENT MADE TO 35 THOUSAND. CLIMB AGAIN STARTED AT 400 KEAS AT 35 THOUSAND WITH LEVEL OFF AT 45 THOUSAND AT 390 KEAS. BUFFETT ENCOUNTERED AT 1.37 TO 1.40 MACH. AT THIS POINT LEFT AD BLEW OUT, AND CONSIDERABLE COMPRESSOR STALL WAS ENCOUNTERED. BOTH THROTTLES RETARDED TO DECELERATE, PILOT BELIEVES BOTH ENGINES WERE COMPRESSOR STALLING. MOVING THROTTLES FORWARD AGAIN DROKE THE STALLS ON BOTH ENGINES. DURING THIS INCIDENT THE PILOT NOTED VERY GOOD REACTIONS ON PART OF STABILITY AUGMENTATION SYSTEM.

APPROVED FOR RELEASE
DATE: AUG 2007~~SECRET~~

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ONE DEGREE OF YAW WAS NOTED MOMENTARILY, THEN DAMPENED OUT. NO NOTICEABLE PITCH OR ROLL MOVEMENTS NOTED. DESCENT WAS MADE TO TEN THOUSAND WHERE STEP INPUTS TO ROLL PITCH AND YAW AXES WERE MADE. AUGMENTATION SYSTEM REACTIONS WERE EXCELLENT. NORMAL LANDING WAS MADE WITHOUT DRAG CHUTE, [REDACTED] 80 KNOTS. PILOT NOTED THAT BEST BRAKING TECHNIQUE APPEARS TO BE A STEADILY INCREASING APPLICATION OF BRAKING COINCIDENT WITH DECREASING AIRSPEED. AIRCRAFT SHUT DOWN WITH NO MALFUNCTIONS TO BE CORRECTED FOR TURNAROUND. FLIGHT NUMBER 18 WAS ESSENTIALLY AS FOLLOWS: TOTAL TIME 57 MINUTES. TAKE-OFF AT 1020 LOCAL WEIGHING 85,000 POUNDS, CG AT APPROXIMATELY 22.2 PERCENT MAC IN AB WITH WATER. PILOT MR. SHALK. CLIMB MADE TO 40 THOUSAND AT 400 KEAS. DAMPERS WERE TURNED OFF FOR SOME SUPERSONIC UNDAMPENED LATERAL AND DIRECTIONAL PULSE CHECKS. SOME YAWING AND ROLLING MOMENT WAS NOTICEABLE, WITH PITCH NO PROBLEM. STABILITY AUGMENTATION WAS TURNED BACK ON AND AIRCRAFT ACCELERATED TO 1.3 MACH. BYPASS DOORS WERE OPENED. CLIMB MADE AT 1.3 MACH TO 45 THOUSAND AND ACCELERATED TO 1.51 MACH WITH BY PASS DOORS REMAINING OPENED. NO BUFFETING OR SHAKING WAS EVIDENT AT ALL IN THIS CONDITION. THIS VERY INTERESTING AS IT INDICATED THAT OUR PROBLEM HAS BEEN RELATED TO PRESENT ENGINE INSTALLATION WITH FIXED SPIKE AND PROBABLY IS NOT AN AIRFRAME EFFECT. DESCENT WAS MADE TO 20 THOUSAND WHERE EMERGENCY GEAR EXTENSION WAS COMPLETED. NO REPETITION OF INADVERTANT DAMPER SHUTDOWN WAS NOTED.

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DESCENT WAS MADE FOR LANDING. LANDING WAS NORMAL, NO CHUTE, ROLLOUT
[] PILOT CONCURS WITH PREVIOUS FLIGHT IN THAT BRAKING TECH-
NIQUE IS BEING DEVELOPED THAT SHOULD PRECLUDE BLOWING OF TIRES AS
HAS BEEN OCCURRING ON MANY PREVIOUS FLIGHTS. AIRCRAFT LANDED IN
COMMISSION. NEXT FLIGHT TENTATIVELY SCHEDULED FOR AFTERNOON OF 2
JULY.

END OF MESSAGE

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